

IN THE CLAIMS

Claims 1-41. (cancelled)

42. (currently amended) A method for controlling material flow in production of a product comprised of a plurality of individual mechanical or electronic assembly components as parts or part aggregates for assembly into said product, comprising the steps of:

producing said individual parts or part aggregates at a supplier production site;

recording production and delivery data regarding the individual parts or part aggregates, and in addition to said production and delivery data also recording quality data comprising at least one tolerance value range regarding the individual mechanical or electronic assembly components as said parts or part aggregates;

storing said production and delivery data and said quality data in an individual transponder physically connected to each individual part or individual part aggregate;

delivering said individual parts or part aggregates to a goods receipt of a logistic system;

reading said production and delivery data from the transponder at said goods receipt and using the data for controlling further material flow such that the individual parts or part aggregates are transported in a controlled manner to predetermined, subsequent assembly process stations at an assembly production site for said product;

before storage, reading and checking said quality data comprising said at least one tolerance value range at a quality check station of said assembly production site and if the quality check yields that said mechanical or electronic

assembly components as said delivered parts or part aggregates lie outside of the at least one tolerance value range, rejection and return is automatically activated;

taking in the individual parts by an assembly production site operator and storing them in an assembly production site storage until they are required for assembly to create said product;

detecting with a transponder reader a removal of an individual part or part aggregate from said assembly production site storage for its assembly to produce said product, and only triggering a payment obligation for the assembly production site operator upon said transponder reader detected removal of the individual part or part aggregates from the assembly production site storage to produce said product; and

assembling said product from said electronic or mechanical assembly components.

43. (previously presented) The method according to claim 42 wherein at least one group of the individual parts or part aggregates is a mass production article that is delivered at the goods receipt in a quantity of more than five in a container, and wherein the container has the transponder connected thereto in which is stored a common quality score regarding the group of mass production articles in the container.

44. (previously presented) The method according to claim 43 wherein information about a quantity of the plurality of the articles located in the container is additionally stored in the transponder.

45. (previously presented) The method according to claim 42 wherein at least one of reading or writing of data at the transponder occurs with a mobile computer

that comprises a first interface for wireless communication with the transponder and a second interface for communication with a computer network.

46. (previously presented) The method according to claim 45 wherein a wireless communication occurs via the computer network interface.

47. (previously presented) The method according to claim 42 where at least one individual part or part aggregate is housed in a package and the transponder is attached on the package.

48. (previously presented) The method according to claim 42 wherein a part aggregate-related transponder is added to a part aggregate of the parts, and data about the part aggregate are stored in the transponder.

49. (previously presented) The method according to claim 42 wherein an input of the part or part aggregate is recorded at the goods receipt by means of the transponder data.

50. (cancelled)

51. (previously presented) The method according to claim 42 wherein the data belonging to an individual part or individual part aggregate and stored on its connected transponder, are stored on a further finished product transponder located on said assembled product in a finished state.

52. (previously presented) The method according to claim 42 wherein additional data regarding at least one of recycling or disposal are stored in the transponder associated with the individual part or part aggregate.

53. (previously presented) The method according to claim 42 wherein the data are at least one of recorded, stored or generated in a computer program and at least one of the material flow or production process are controlled by a computer.

54. (previously presented) The method according claim 42 wherein if a check for the quality data yields the quality data are deviating, then additionally storing the deviating quality data in the transponder.

55. (currently amended) A system for controlling material flow in production of a product comprised of a plurality of individual mechanical or electronic assembly components as parts or part aggregates for assembly into said product, comprising:

an individual transponder physically connected to each individual part or individual part aggregate, said transponder having stored therein production and delivery data regarding the individual part or part aggregate and in addition having stored therein quality data comprising at least one tolerance value range regarding the individual mechanical or electronic assembly component as said part or part aggregate;

a read system which reads said production and delivery data from the transponder at a goods receipt and which for controls further material flow such that the individual parts or part aggregates are transported in a controlled manner to predetermined, subsequent assembly process stations at an assembly production site for said product, and before storage said read system reading and checking said quality data comprising said at least one tolerance value range at a quality check station of said assembly production site for said product and if the quality check yields that said mechanical or electronic assembly components as said delivered parts or part aggregates lie outside of the at least one tolerance value range, rejection and return is automatically activated;

a storage for taking in the individual parts or part aggregates at the production site until they are required for assembly to create said product; and

a detection system for detecting with a transponder reader a removal of an individual part or part aggregate from said assembly production site storage for its assembly to produce said product, said detection system being utilized to only trigger a payment obligation for an assembly production site operator upon said transponder reader detected removal of the individual part or part aggregate from the assembly production site storage to produce said product.

56. (cancelled)

57. (previously presented) The system of claim 55 wherein said read system, when reading and checking said quality data at least one tolerance value range at said quality check station, determines whether the delivered individual parts or part aggregates lie outside of said at least one tolerance value range, and if so, deviating data is additionally stored by a write system on the respective individual transponder.

58. (previously presented) The system of claim 55 wherein at least one group of the individual parts or part aggregates is a mass production article that is delivered at the goods receipt in a quantity of more than five in a container, and wherein the container has the transponder connected thereto in which is stored a common quality score regarding the group of mass production articles in the container.

59. (previously presented) The system of claim 55 wherein the data belonging to an individual part or individual part aggregate and stored on its connected transponder, are stored on a transponder located on further finished product said assembled product in a finished state.

60. (previously presented) The method of claim 42 wherein said read system when reading and checking said quality data at least one tolerance value range at said quality check station determines whether the delivered individual parts or part

aggregates lie outside of said at least one tolerance value range, and if so, deviating data is additionally stored by a write system on the respective individual transponder.